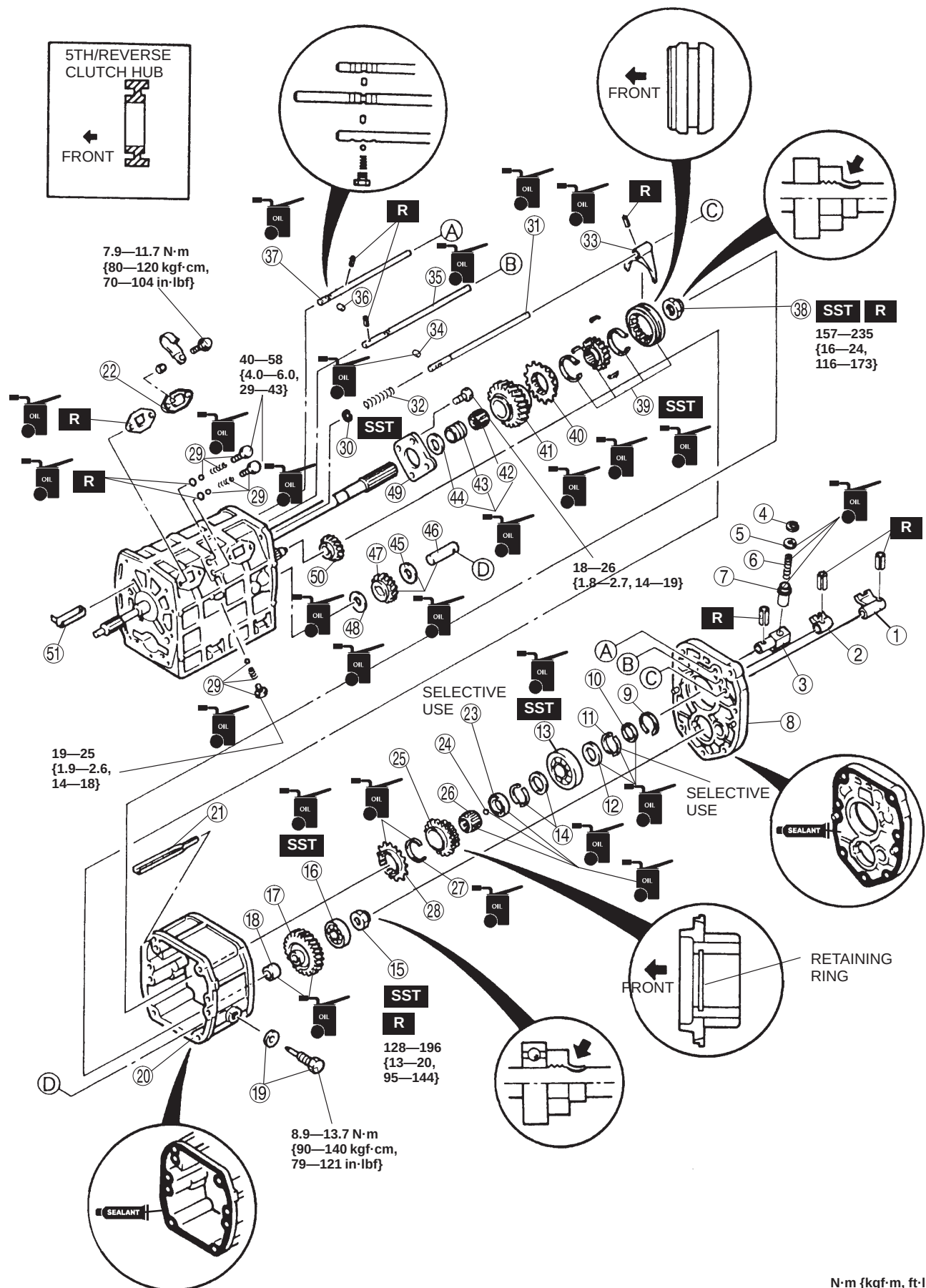


1. Disassemble in the order indicated in the table.
2. Assemble in the reverse order of disassembly.



N·m {kgf·m, ft·lbf}

MANUAL TRANSMISSION

1	5th/reverse shift rod end
2	3rd/4th shift rod end
3	1st/2nd shift rod end
4	Retaining ring
5	Spring retainer
6	Spring
7	Pin and retaining ring
8	Bearing housing
9	Snap ring
10	Thrust washer
11	C-washer + Assembly Note
12	Retaining ring
13	Mainshaft rear bearing + Disassembly Note + Assembly Note
14	C-washer and retaining ring
15	Locknut (counter shaft) + Disassembly Note + Assembly Note
16	Counter shaft rear bearing + Disassembly Note + Assembly Note
17	Counter 5th gear
18	Spacer
19	Set bolt and washer
20	Center housing
21	Oil pass
22	Blind cover
23	Thrust lock washer + Assembly Note
24	Steel ball
25	5th gear
26	Bearing
27	Retaining ring
28	5th synchronizer ring + Disassembly Note
29	Cap plug, spring, and detent ball
30	Retaining ring + Disassembly Note + Assembly Note
31	5th/reverse shift rod
32	Spring
33	5th/reverse shift fork
34	Interlock pin + Assembly Note
35	3rd/4th shift rod + Disassembly Note + Assembly Note
36	Interlock pin + Assembly Note
37	1st/2nd shift rod + Disassembly Note + Assembly Note

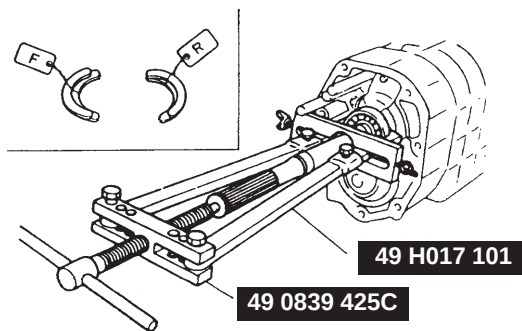
38	Locknut (Mainshaft) + Disassembly Note + Assembly Note
39	5th/reverse clutch hub component + Disassembly Note
40	Reverse synchronizer ring + Disassembly Note
41	Reverse gear
42	Bearing
43	Inner race
44	Thrust washer
45	Thrust washer
46	Reverse idler gear shaft
47	Reverse idler gear
48	Thrust washer
49	Bearing cover
50	Counter reverse gear
51	Oil pass

Mainshaft Rear Bearing Disassembly Note

Note

- The front and rear C-washers may have different thicknesses.

- Remove the snap ring, washer, retaining ring, and C-washers.
- For proper reassembly, identify the front and rear C-washers.
- Remove the mainshaft rear bearing by using the **SSTs**.



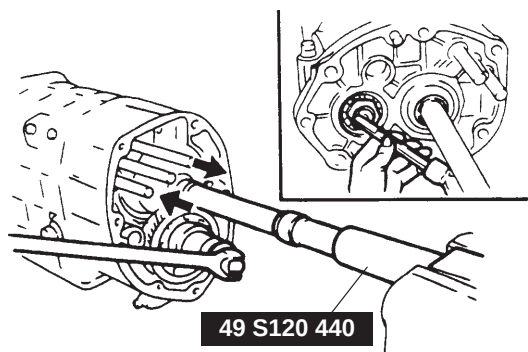
Locknut (Counter Shaft) Disassembly Note

- Uncrimp the tab of the locknut.
- Shift the clutch hub sleeves to 1st gear and reverse gear to put the gears in a double-engaged condition.

Note

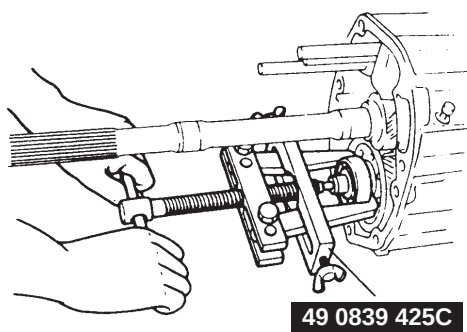
- Use the protective plates to prevent damage to the **SST**.

- Hold the mainshaft by using the **SST** and a vise.
- Remove the locknut.



Counter Shaft Rear Bearing Disassembly Note

- Remove the counter shaft rear bearing by using the SST.

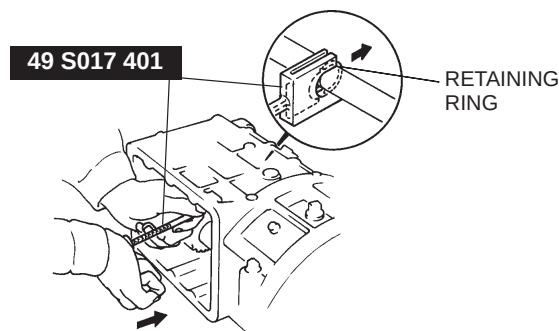


5th/reverse Synchronizer Ring Disassembly Note

- Tag and identify each synchronizer ring.

Retaining Ring Disassembly Note

- Remove the roll pin from the 5th/reverse shift fork.
- Remove the retaining ring by using the SST.

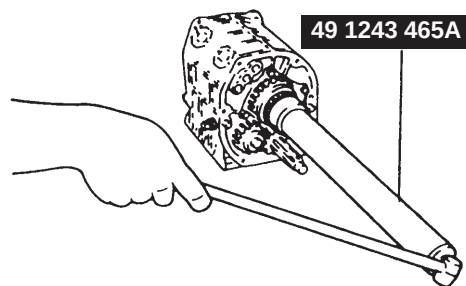


3rd/4th Shift Rod, 1st/2nd Shift Rod Disassembly Note

- Shift the transmission into 4th gear. This will provide adequate space to drive out the spring pin. Drive the spring pin from the 3rd/4th shift fork.
- Slide the 3rd/4th shift rod out from the rear of the transmission case.
- Drive the spring pin from the 1st/2nd shift fork. Slide the 1st/2nd shift rod out from the rear of the transmission case.
- Remove the interlock pins.

Locknut (Mainshaft) Disassembly Note

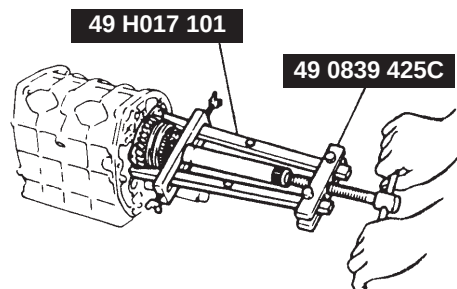
- Uncrimp the tab of the locknut.
- Shift into 1st gear and 4th gear to lock the rotation of the mainshaft.
- Remove the locknut by using the SST.



5th/reverse Clutch Hub Component Disassembly Note

- Attach the SSTs to the bearing cover and remove the component which consists of the following parts:

- 5th/reverse clutch hub component
- Reverse synchronizer ring
- Reverse gear

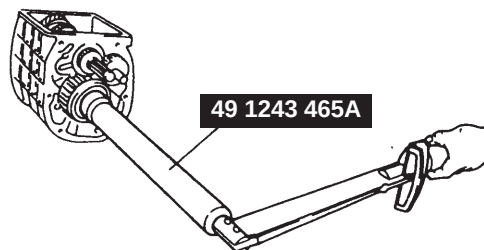


Locknut (Mainshaft) Assembly Note

- Shift into 1st gear and 4th gear to lock the rotation of the mainshaft.
- Install a new locknut and tighten it by using the SST.

Tightening torque

157—235 N·m {16—24 kgf·m, 116—173 ft·lb}



Note

- The total combined thickness of the front and rear thrust washers must equal 6.0 mm {0.236 in}.

- Inspect the clearance between the synchronizer key and the exposed edge of the synchronizer ring. If it is not as specified, adjust with the thrust washers on the front and rear of the mainshaft bearing.

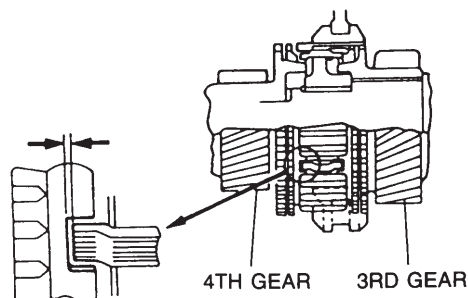
Clearance

2.0 mm {0.079 in} max.

Available thrust washer thickness

2.5 mm {0.098 in}, 3.0 mm {0.118 in}

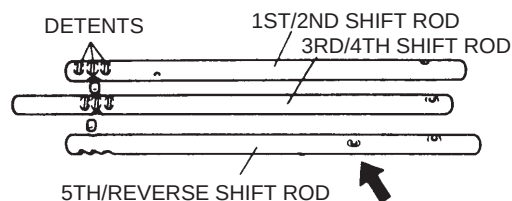
3.5 mm {0.138 in}



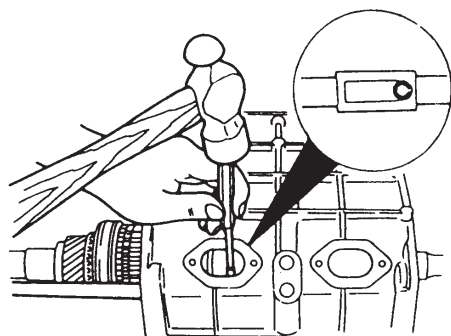
4. Stake the locknut into the mainshaft groove.

1st/2nd Shift Rod, 3rd/4th Shift Rod, Interlock Pin Assembly Note

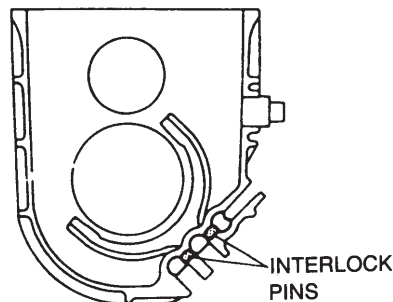
1. Refer to the figure to identify each shift rod when installing the shift rods in the following procedure. Install them so that the detent grooves are facing the detent balls.



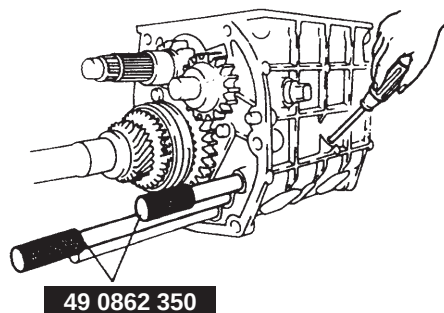
2. Slide the 1st/2nd shift rod into the case.
3. Secure the 1st/2nd shift fork to the rod with a new roll pin. The split in the roll pin must be facing in the direction shown in the figure.



4. Install the interlock pins as shown in the figure when doing steps 4 through 8.

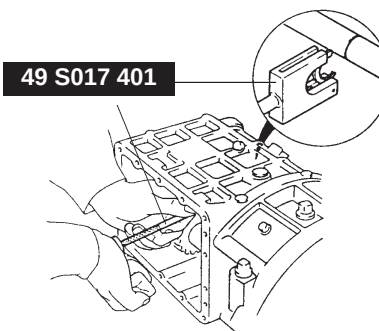


5. Slide the two SSTs into the transmission case to guide the interlock pins, and insert the first pin.
6. Remove the 3rd/4th shift fork guide from the case.
7. Slide the 3rd/4th shift rod containing the interlock pin (small) into the case.
8. Secure the 3rd/4th shift rod onto the fork with the new roll pin.
9. Insert the remaining interlock pin and remove the SSTs.



Retaining Ring Assembly Note

- Push back the spring, and install a new clip to the 5th/Reverse shift rod by using the SST.



Thrust Lock Washer Assembly Note

1. Install the steel ball and thrust lock washer.
2. Install the 3.0 mm {0.118 in} C-washers and hold them with a retaining ring.
3. Push the C-washers toward 5th gear and measure the clearance between the C-washers and thrust lock washer. If the clearance is not as specified, select the proper thrust lock washer.

Standard

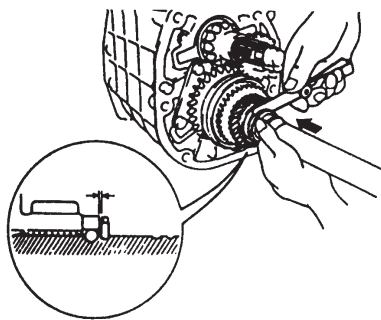
0.1—0.2 mm {0.004—0.008 in}

Available thrust lock washer thickness

6.2 mm {0.244 in}, 6.3 mm {0.248 in},

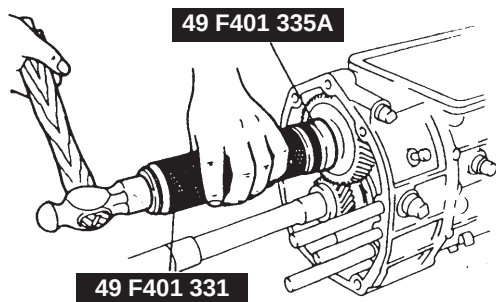
6.4 mm {0.252 in}, 6.5 mm {0.256 in},

6.6 mm {0.260 in}, 6.7 mm {0.264 in}



Counter Shaft Rear Bearing Assembly Note

- Drive on the counter shaft rear bearing by using the SST.

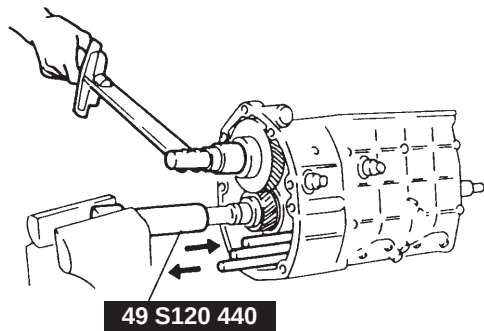


Locknut (Counter Shaft) Assembly Note

1. Connect the SST to the mainshaft and mount it securely in a vise.
2. Shift into 1st gear to lock the counter shaft. Install the new counter shaft lock nut.

Tightening torque

128—196 N·m {13—20 kgf·m, 95—144 ft·lbf}



3. Stake the locknut into the counter shaft groove.

Main shaft Rear Bearing Assembly Note

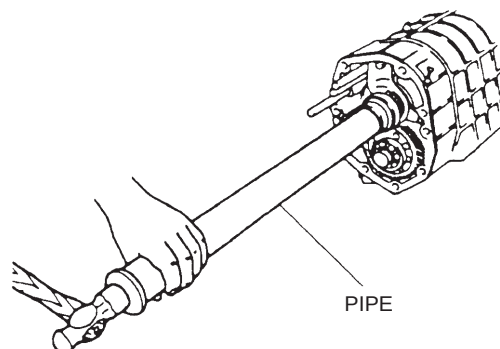
- Drive on the mainshaft rear bearing by using a suitable pipe.

Bearing inner diameter

22 mm {0.87 in}

Bearing outer diameter

56 mm {2.2 in}



C-washer Assembly Note

1. Install the C-washers and hold them in place with a new retaining ring.
2. With points A and B pressed tightly together, measure the clearance between the C-washers and the groove. If the clearance is not as specified, select the proper C-washers.

Standard

0—0.1 mm {0—0.004 in}

Available C-washer thickness

2.9 mm {0.114 in}, 3.0 mm {0.118 in},
3.1 mm {0.122 in}, 3.2 mm {0.126 in}

